

A₂ *b1* 3. (Amended Once) The method of Claim 1 wherein said coating is carried out prior to placing said sorbent structure inside said gas duct.

A₃ *b1* 5. (Amended Once) An apparatus for removing a vapor-phase contaminant from a contaminated gas stream in a duct, said apparatus comprising:

at least one sorbent structure;
a means for coating fresh sorbent onto said sorbent structure;
a means for passing a contaminated gas over said sorbent structure having said fresh sorbent thereon to produce saturated sorbent; and
a means for removing and collecting said saturated sorbent.

Please add the following new Claims 6-17 as follows:

A₄ *b1* -- 6. (New) A method for removing a vapor-phase contaminant from a gas stream, comprising:

coating a non-porous sorbent structure positioned in a gas duct with a sorbent;
passing a gas stream comprising a vapor-phase contaminant through the gas duct;
contacting the vapor-phase contaminant with the sorbent, thereby adsorbing the vapor-phase contaminant onto the sorbent;
removing the sorbent having the adsorbed vapor-phase contaminant from the gas duct;
and
recoating the non-porous sorbent structure with fresh sorbent.

7. (New) The method of Claim 6, wherein the coating comprises attracting the sorbent to the non-porous sorbent structure using an attractive force.

8. (New) The method of Claim 7, wherein the attracting comprises attracting the sorbent to the non-porous sorbent structure using an attractive force selected from the group consisting of electrostatic attraction, magnetic attraction, gravitational attraction, van der Waals attraction, and combinations thereof.

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9. (New) The method of Claim 6, wherein the coating comprises magnetically attracting the sorbent to the non-porous sorbent structure.
10. (New) The method of Claim 9, wherein the removing comprises demagnetizing the sorbent and the sorbent structure.
11. (New) The method of Claim 6, wherein the non-porous sorbent structure is selected from the group consisting of tubes, plates, monoliths, walls, vanes and combinations thereof.
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12. (New) The method of Claim 6, wherein the vapor-phase contaminant comprises mercury.
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13. (New) The method of Claim 6, wherein the recoating comprises attracting the fresh sorbent to the non-porous sorbent structure using an attractive force selected from the group consisting of electrostatic attraction, magnetic attraction, gravitational attraction, van der Waals attraction, and combinations thereof.
14. (New) The method of Claim 6, wherein the recoating comprises:
removing the non-porous sorbent structure from the gas duct;
applying the fresh sorbent to the non-porous sorbent structure; and
repositioning the non-porous sorbent structure in the gas duct.
15. (New) The method of Claim 6, wherein the recoating comprises recoating the non-porous sorbent structure with the fresh sorbent while the non-porous sorbent structure remains in the gas duct.
16. (New) A method for removing a vapor-phase contaminant from a gas stream, comprising:
coating a sorbent structure positioned in a gas duct with a sorbent, wherein the coating comprises magnetically attracting the sorbent to the sorbent structure;
passing a gas stream comprising a vapor-phase contaminant through the gas duct;

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contacting the vapor-phase contaminant with the sorbent, thereby adsorbing the vapor-phase contaminant onto the sorbent;

removing the sorbent having the adsorbed vapor-phase contaminant from the gas duct;

and

repeating the coating with fresh sorbent.

17. (New) An apparatus for removing a vapor-phase contaminant from a gas stream, comprising:

a gas duct;

a magnetized sorbent structure positioned in said gas duct; and

a sorbent attached to said magnetized sorbent structure,

wherein said magnetized sorbent structure is configured to be periodically demagnitized, thereby allowing said sorbent to become detached from said magnetized sorbent structure. —
